# California Office of Emergency Services and Earthquake Prediction

Michael Reichle
CGS
May 18, 2007

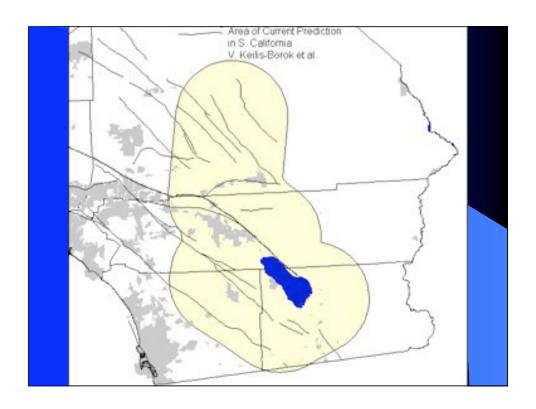
### OES Activities re Earthquake Predictions

- Convenes CEPEC
- Disseminates Findings and Notifications to Counties and Media
- Developed California Earthquake Prediction Response Plan
- Developed California Earthquake Advisory Response Plan

### CEPEC Rapid Assessment Plan

- Post Earthquake (M>5) Conference Call
- Assessment of Probabilities 'Follow-on' Quake
- Issuance of Earthquake Advisories based on Recommendations of CEPEC

Response to earthquake predictions



#### **CEPEC Conclusions**

 K-B methodology "appears to be a legitimate approach in prediction research."

#### **HOWEVER**

- "physical basis for the prediction.., has not been substantiated"
- not yet issued enough predictions for statistical validation of forecasting methods
- "results do not at this time warrant any special public policy actions in California"

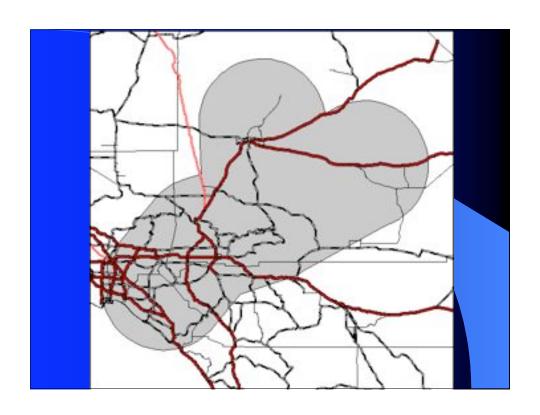
#### **CEPEC Recommendations**

"CEPEC recommends that all jurisdictions review and periodically exercise existing preparedness and response plans"

"Citizens..., should make sure they have undertaken all general preparedness actions recommended by emergency management organizations and the Red Cross"

## OES Recommendations to local agencies

- If necessary, update your earthquake response plan
- If you haven't conducted an earthquake exercise w/i the last year, consider doing so.
- Look into available real-time information from CISN
- OES will assist you with an earthquake exercise



### CEPEC advice re KB2

- Given the track record so far and the lack of a physical basis, the Council does not consider the method to be a basis for public policy.
- Therefore, CEPEC advises OES to take no special public policy actions based on this, or similar predictions.

#### **OES** actions re KB2

- Less response than to KB1
- Telephone briefing of various officials

### California Earthquake Advisory Plan

- Statements by OES of scientific assessments of enhanced likelihood for damaging earthquakes in a designated area and time frame (3-5 days).
- Issued following earthquakes in which there is concern about subsequent damaging earthquakes
- Notify State agencies, local governments and federal agencies.
- May issue press advisory.

### California Earthquake Advisory Plan

 Local governments disseminate information to key personnel, ensure readiness of systems essential to emergency operations, implement protective and mitigative actions, provide guidance to public on appropriate precautionary actions.

#### Lake Elsman Advisory

- OES advises Santa Clara, Santa Cruz, Monterey and San Benito Counites
- Increased likelihood exists for continued seismic activity
- As large as or larger than M5.7 on 6/27/89
- Over approximately next 5 days
- No specific prediction or threat

#### CEPEC, 7/31/92

- Following Landers earthquake
- CEPEC advised OES
- "A Magnitude 6 or larger event on the San Andreas between the Cajon Pass and Bombay Beach that has been verified by the NEIC should be the basis for OES to issue an advisory."
- These advisories should be pre-developed.

### Earthquake Prediction Response Plan

- Validation by CEPEC
- Notify Governor's Office
- Notify local governments, state and federal agencies

### Earthquake Prediction Response Plan

- OES may take the following actions
  - Issue press statement
  - Prepare or Activate SOC, REOCs
  - Establish rumor control hotline
  - Consider recommending Governor issue a warning or proclaim a state of emergency
  - Ensure public advised of actions to reduce risk of damage and injury
  - Alert damage assessment teams to be on standby.

### Earthquake Prediction Response Plan

- CEPEC has validated only one prediction Parkfield
- OES developed a separate Parkfield Earthquake Prediction Response Plan
- OES activated the plan only once the first A-level alert of October 1992